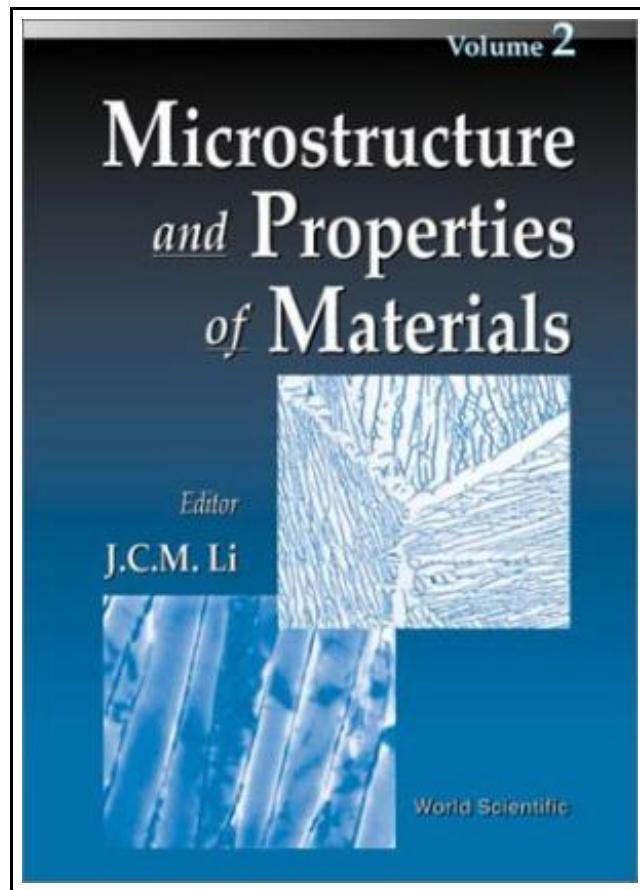


## **Microstructure and Properties of Materials: Vol 2 (Hardback)**



Filesize: 8.34 MB

### **Reviews**

*These types of publication is the greatest publication available. It really is filled with knowledge and wisdom Once you begin to read the book, it is extremely difficult to leave it before concluding.*  
**(Prof. Lenna Beatty III)**

## MICROSTRUCTURE AND PROPERTIES OF MATERIALS: VOL 2 (HARDBACK)

[DOWNLOAD](#)

World Scientific Publishing Co Pte Ltd, Singapore, 2000. Hardback. Book Condition: New. 218 x 162 mm. Language: English . Brand New Book. This is the second volume of an advanced textbook on microstructure and properties of materials. (The first volume is on aluminum alloys, nickel-based superalloys, metal matrix composites, polymer matrix composites, ceramics matrix composites, inorganic glasses, superconducting materials and magnetic materials). It covers titanium alloys, titanium aluminides, iron aluminides, iron and steels, iron-based bulk amorphous alloys and nanocrystalline materials. There are many elementary materials science textbooks, but one can find very few advanced texts suitable for graduate school courses. The contributors to this volume are experts in the subject, and hence, together with the first volume, it is a good text for graduate microstructure courses. It is a rich source of design ideas and applications, and will provide a good understanding of how microstructure affects the properties of materials. Chapter 1, on titanium alloys, covers production, thermomechanical processing, microstructure, mechanical properties and applications. Chapter 2, on titanium aluminides, discusses phase stability, bulk and defect properties, deformation mechanisms of single phase materials and polysynthetically twinned crystals, and interfacial structures and energies between phases of different compositions. Chapter 3, on iron aluminides, reviews the physical and mechanical metallurgy of Fe<sub>3</sub>Al and FeAl, the two important structural intermetallics. Chapter 4, on iron and steels, presents methodology, microstructure at various levels, strength, ductility and strengthening, toughness and toughening, environmental cracking and design against fracture for many different kinds of steels. Chapter 5, on bulk amorphous alloys, covers the critical cooling rate and the effect of composition on glass formation and the accompanying mechanical and magnetic properties of the glasses. Chapter 6, on nanocrystalline materials, describes the preparation from vapor, liquid and solid states, microstructure including grain boundaries and their junctions, stability with respect to grain...

[Read Microstructure and Properties of Materials: Vol 2 \(Hardback\) Online](#)[Download PDF Microstructure and Properties of Materials: Vol 2 \(Hardback\)](#)

## Related eBooks

---



### **Children s Educational Book: Junior Leonardo Da Vinci: An Introduction to the Art, Science and Inventions of This Great Genius. Age 7 8 9 10 Year-Olds. [Us English] (Paperback)**

Createspace, United States, 2013. Paperback. Book Condition: New. 254 x 178 mm. Language: English . Brand New Book \*\*\*\*\* Print on Demand \*\*\*\*\*.ABOUT SMART READS for Kids . Love Art, Love Learning Welcome. Designed to...

[Read eBook »](#)

---



### **Children s Educational Book Junior Leonardo Da Vinci : An Introduction to the Art, Science and Inventions of This Great Genius Age 7 8 9 10 Year-Olds. [British English] (Paperback)**

Createspace, United States, 2013. Paperback. Book Condition: New. 248 x 170 mm. Language: English . Brand New Book \*\*\*\*\* Print on Demand \*\*\*\*\*.ABOUT SMART READS for Kids . Love Art, Love Learning Welcome. Designed to...

[Read eBook »](#)

---



### **More Spaghetti, I Say! (Paperback)**

Scholastic Inc., United States, 1993. Paperback. Book Condition: New. Mort Gerberg (illustrator). Reissue. 218 x 147 mm. Language: English . Brand New Book. With inspiring and educational stories, Scholastic's Hello Reader series caters to...

[Read eBook »](#)

---



### **Adult Coloring Book Birds: Advanced Realistic Bird Coloring Book for Adults (Paperback)**

Createspace Independent Publishing Platform, United States, 2015. Paperback. Book Condition: New. 254 x 203 mm. Language: English . Brand New Book \*\*\*\*\* Print on Demand \*\*\*\*\*.Take your coloring to the next level with this Advanced...

[Read eBook »](#)

---



### **Nautical Coloring Book: An Advanced Adult Coloring Book of Nautical, Maritime and Seaside Scenes (Paperback)**

Createspace Independent Publishing Platform, United States, 2015. Paperback. Book Condition: New. 254 x 203 mm. Language: English . Brand New Book \*\*\*\*\* Print on Demand \*\*\*\*\*.Take your coloring to the next level with this Advanced...

[Read eBook »](#)